1551-9

J.A. FILE NO. 31-F

# CATALOG 47 LIGHTING INC.



EXCHANGE NATIONAL BANK, CHICAGO

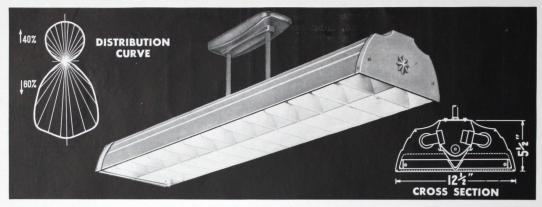
## 425 hting, FLUORESCENT AND INCANDESCENT LIGHTING EQUIPMENT

"Forty-Sixty" Luminaires ... pp. 2 and 3
SkyLux Luminaires ... 4 and 5
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## CURTIS "Forty-Sixty" LUMINAIRE



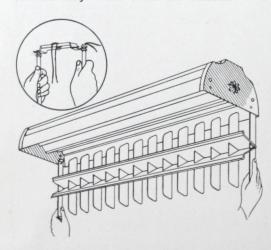
For Two 40-watt Fluorescent Lamps

The "Forty-Sixty" is designed for eye comfort. The low brightness of the luminaire blends with the illuminated ceiling, producing a comfortable field of vision. High levels of illumination without distracting and harmful glare are readily attained with this unit.

**Application:** Particularly recommended for offices, classrooms and drafting rooms.

**Light Gontrol:** The ceiling is illuminated by an indirect component of approximately 40% of the light output. The 60% direct component is louvered to provide 35° crosswise and 25° lengthwise shielding. Within the shielded zone maximum brightness does not exceed .3 candles per sq. in. crosswise or .6 candles per sq. in. lengthwise.

Material: Aluminum and steel. Aluminum reflectors, louver fins and canopy. Steel wiring channel, ends and hanger stems. Plastic end ornament.



Finish: Satin Aluminum. Alzak Aluminum reflectors and louver fins. White Fluracite wiring channel and end plates. Ornamental star in Ivorytone.

**Dimensions:** Width, 12½"; depth of body, 5½"; length, 48¾" including ornaments; stem hanger suspension 12" ceiling to top of body. Weight installed, approximately 25 lbs. per four-foot unit.

Illumination Data: A Coefficient of Utilization chart is given below for planning the lighting layout. See page 15 for Room Index table and planning procedure.

REFLEC-	CEILING	75	5%		5	0%		30%		
	WALLS	50%	30%	10%	50%	30%	10%	30%	10%	
R	J	.30	.27	.26	.28	.26	.25	.24	.23	
0	1	.36	.34	.33	.33	.32	.31	.30	.28	
0	н	.40	.38	.36	.36	.35	.33	.33	.32	
M	G	.43	.41	.39	.40	.37	.36	.35	.34	
	F	.46	.43	.41	.41	.39	.38	.37	.35	
- 1	E	.49	.47	.45	.44	.42	.41	.39	.38	
N	D	.52	.49	.47	.46	.45	.43	.41	.40	
D	С	.54	.51	.49	.47	.46	.44	.42	.41	
E	В	.56	.53	.52	.50	.48	.47	.43	.42	
X	A	.57	.55	.53	.51	.49	.48	.45	.43	

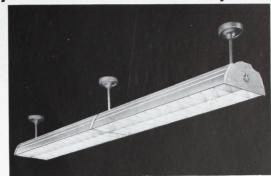
Construction: Louver is hinged and will swing down for cleaning and relamping or for access to the wiring channel. If desired, however, assembly can be completely removed by detaching two screws. Special 12" two-stem hanger permits easy installation. Other length hangers can be supplied where required. (See price list.)

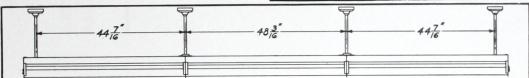
Maintenance: All-metal unit with no horizontal reflecting or diffusing surfaces to collect dust... designed to require minimum of cleaning. Lamps may be replaced without removing the louver.

## FOR OFFICES, SCHOOLS, DRAFTING ROOMS, ETC.

Continuous Luminaires: For a continuous fixture with single-stem hangers located between sections and at the ends of the run, order one 4 ft. Basic unit and as many 4 ft. Extension sections as are needed to complete the run. Basic unit is packed with two hangers for the ends, Extension section with one hanger. Wire entrance can be made through any hanger. Allow 48-3/16" on centers for spotting hangers except at ends where 44-7/16" o. c. is allowed.

If continuous fixtures are wanted with centrally located two-stem hangers, order the same unit as for individual mounting. Connectors are furnished with all units. Allow 48-3/16" o. c.

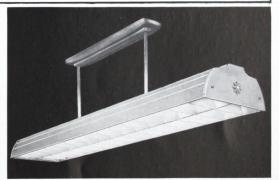




## "Forty-Sixty-One" UNIT

"Forty-Sixty-One" is the 5', two 100-watt size "Forty-Sixty". This unit is identical in cross-section and construction with "Forty-Sixty" except that it is 603/4" long and arranged for use with two 100-watt lamps. Weight installed approximately 33 lbs. per 5' section.

Distribution is similar to that of the "Forty-Sixty". "Forty-Sixty-One" can also be furnished for continuous runs with single-stem hangers. Allow 60-3/16" on centers for spotting hangers except at ends of run where 56-7/16" is allowed.



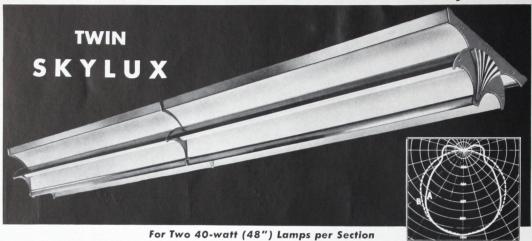
#### CATALOG NUMBERS FOR INDIVIDUAL AND EXTENSION UNITS

Wired: Furnished wired for 110-125 volt AC circuits with high power factor two lamp ballast and FS-4 or FS-64 starters. Total watts: 95 for 4060 series; 232 for 4061 series. See price list for wiring for other voltages or instant start ballasts.

Less lamps. Bears Underwriters' Label. Catalog numbers are for complete units carton packed with standard 12" suspension. (See price list for other suspensions. Stems for 18", 24" and 36" suspensions are carried in stock.)

WATTS	SINGLE-S	TEM HANGER	TWO-STEM HAN	IGER
	Basic Unit	Extension Section	Individual Unit or Extension	Stem Spacing
2- 40	4060-CB	4060-CE	4060-C	71/2"
2-100	4061-CB	4061-CE	4061-C	21"

## STANDARD FLUORESCENT Sky Lux



TWIN SKYLUX luminaires are for mounting on ceiling or for suspension on hangers. Each Basic unit is a complete luminaire in itself or may be used with one or more Extension sections to make up a continuous run.

Basic Unit: A complete luminaire including decorative ornament for each end. Extension Section: For joining in continuous runs. Includes coupling set. Basic unit consists of this Extension section plus Catalog No. 6411 (pair end ornaments).

Wired: Furnished wired for 110-125 volt AC circuits with high power factor two-lamp ballast and FS-4 starters. Total watts: 95 (including ballast). See price list for wiring for other voltages or instant start ballasts. Bears Underwriters' Label.

**Dimensions:** Overall height, 6%"; width, 15%"; each Extension section adds 4814" to the total length when assembled. Basic section is 48%" in length.

Finish: Satin Gray and Fluracite. Moldings and end plates finished Satin Gray. Reflector and lamp shield Fluracite (white).

Installation: Designed to be mounted flush with bolts or screws or for suspension on hangers. Lead wires can be run from one unit to another. Weight installed approximately 35 lbs. per section. CATALOG NO. DESCRIPTION
895-C Basic Twin Ske

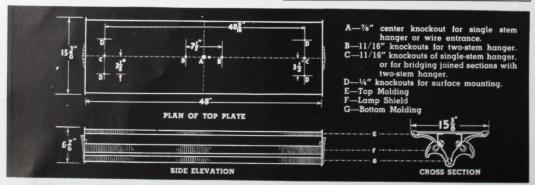
895-C Basic Twin SkyLux
896-C\* Extension Twin SkyLux

Catalog numbers above are for complete units carton packed and wired for 110-125 volts AC. Less lamps. \*896-C is regular 4' extension; 2' extension is Catalog No. 882-C for two 20-watt lamps.

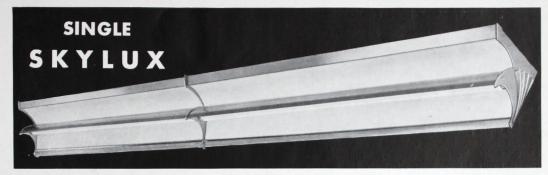
#### COEFFICIENTS OF UTILIZATION

REFLECTION	CEILING	75%			50%			30%	
FACTOR	WALLS	50%	30%	10%	50%	30%	10%	30%	10%
R	J	.32	.28	.25	.31	. 28	. 25	.27	.25
0	1	.39	.35	.33	.38	.35	.32	.35	.32
0	н	.43	.40	.37	. 42	.39	.37	.38	.36
м	G	.47	.44	.41	.45	. 42	. 40	.41	.39
.	F	.50	.47	.43	.47	. 45	.42	.44	.42
	E	.54	.51	.47	.52	. 49	.47	. 48	. 46
N	D	.58	.54	.51	.55	. 52	.50	.51	.49
D	С	.60	.56	.52	.57	. 54	.52	.53	.51
E	В	.63	.59	.56	.60	. 56	.55	.55	.54
x	A	.64	.61	.58	.61	. 58	.56	.57	.55

For average conditions a maintenance factor of 75% is suggested.

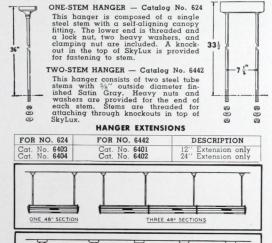


## FOR COMMERCIAL LIGHTING



#### HANGERS FOR TWIN SKYLUX

Twin SkyLux can be installed with either one-stem or twostem hangers. Order one two-stem hanger for each 48" section or order one more hanger than the number of sections in the run if one-stem hangers are to be used. See diagrams below.



#### For One 40-watt (48") Lamp per Section

**SINGLE SKYLUX** luminaires are for mounting along the right angle juncture of the wall and ceiling, or for mounting horizontally on the wall below the ceiling line. Each Basic unit is a complete luminaire in itself or may be used with one or more Extension sections to make a continuous unit.

Basic Unit: A complete luminaire including ornament for each end. Extension Section: Identical with Basic unit, but includes parts for joining to Basic unit or other Extension sections. Less end ornaments.

**Wired:** Furnished wired for 110-125 volt AC circuits with high power factor single lamp ballast and FS-4 starter. Total watts, 51 (including ballast). See price list for wiring with other voltages or ballasts. *Bears Underwriters' Label*.

**Dimensions:** Overall height 7"; width 8½"; each Basic section is 48%" in length and each Extension section used will add 48¾" to the total length when assembled.

**Finish:** Satin Gray and Fluracite. Moldings and end plates finished Satin Gray. Reflector and lamp shield Fluracite (white).

CATALOG NO.

891-C

892-C

Basic Single SkyLux

Extension Single SkyLux

Catalog numbers above are for complete units, carton packed and wired for 110-125 volts AC. Less lamps.

#### SQUARE INCANDESCENT SURFACE LUMINAIRES

For Use With Twin SkyLux

FOUR 48" SECTIONS

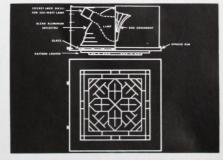
ONE 48" SECTION

door 161/2" square.

**Catalog No. 2230** is suggested where it is desired to provide increased down lighting in a SkyLux run. Distribution is semi-concentrating. Its use permits many interesting ceiling patterns, such as squares, crosses, etc. Twin SkyLux units can be bolted to any or all of the four sides of the unit.

Construction: Made of steel finished Satin Gray with concealed Alzak Aluminum reflector for 200- or 300-watt Medium Base incandescent lamp. A decorative pattern louver in a hinged frame shields the lamp. There is a wire entrance hole and screw holes for mounting on ceiling and each side has one wire entrance hole and two screw holes for joining to Twin SkyLux. One Catalog No. 6411 (pair of SkyLux end ornaments) is included with each unit to cover holes in exposed sides.

Dimensions: Depth 8", Louver projects 7%". Housing is 16" square;



## Star Lux FLUORESCENT LUMINAIRE

#### CATALOG No. 1400

For Four 40-watt (48") Lamps

StarLux is an attractive four-lamp luminaire of high overall efficiency and low brightness, for use as an individual pendant or in continuous

Appearance: Circular canopy offers a pleasing contrast with the straight lines which predominate. Finish is Satin Gray with white Fluracite louver and sanded glass panels.

Construction: Interior finished in efficient, durable Fluracite for highest reflectivity. Diffusing glass panels easily removed for cleaning. Lamps accessible without removing glass. Louver swings down for access to lower lamps. Canopy conceals heavy supporting bridge. Cat. No. GX-207 replacement glass

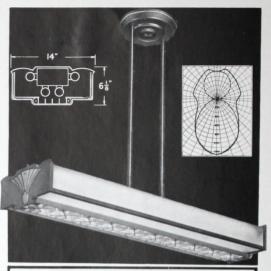
Dimensions: Width, 14"; depth, 61/8"; length, 491/4"; suspension 34" to top of body. Weight installed approximately 47 lbs. per section.

Hanger Extensions: Catalog No. 6401 adds 12" to hanger length, Catalog No. 6402 adds 24"

Continuous Luminaires: The same unit is ordered for individual or continuous runs. Connectors are furnished with all units. End ornaments are removable and knockouts in end plates permit continuous wiring. Allow 48-5/16" length per unit in spotting hangers.

Wired: Furnished wired for 110-125 volt AC circuits with high power factor two lamp ballasts and FS-4 starters. Total watts, 191 (including ballasts). See price lists for wiring for other voltages or instant start ballasts. Bears Underwriters' Label.

Catalog No. 1400: Complete four lamp StarLux with standard 36" hangers carton packed and wired for 110-125 volt AC. Less lamps.



#### COEFFICIENTS of UTILIZATION

STARLUX LUMINAIRE

REFLECTION	Ceiling		75%			509	%	3	0%
FACTOR	Walls	50%	30%	10%	50%	30%	10%	30%	10%
R	1	.24	.20	.18	.21	.19	.17	.17	.16
0	1	.29	.26	.24	.26	.23	.22	.22	.20
0	H	.32	.29	.27	.29	.26	.25	.24	.22
M	G	.36	.32	.30	.32	.29	.26	.26	.25
	F	.38	.35	.32	.34	.31	.29	.28	.27
I	E	.42	.39	.36	.37	.34	.32	.31	.29
N	D	.45	.41	.38	.39	.36	.35	.33	.32
D	c	.47	.44	.40	.41	.38	.36	.34	.33
E	В	.50	.47	.44	.43	.40	.39	.36	.35
X	A	.52	.48	.46	.45	.42	.40	.37	.36

For Average Conditions, a Maintenance Factor of 70% Is Suggested.

#### FLUORESCENT LUMINAIRE NO. 70610-XE

NO. 70610-XE is a four-lamp fluorescent ceiling luminaire of exceptionally decorative and impressive design. This unit is large enough to be suitable for a large interior and of sufficiently low surface brightness for mounting on a low ceiling.



Material and Finish: Made of steel and crystal glass, panels lightly sanded one side. Ceiling molding and end plates Satin Gray. End ornaments are Satin Aluminum. All reflecting surfaces and pattern louver are finished white

Maintenance: Diffusing glass panels easily removed for cleaning. Lamps accessible without removing glass. Louver swings down for access to lower lamps. Replacement glass panel is GX-207.

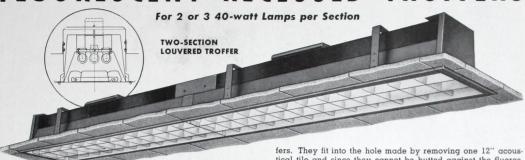
Continuous Luminaires: The same unit is ordered for individual or continuous runs. Connectors are furnished with all units. End ornaments are removable and knockout in end plates permit continuous wiring. Allow 48-5/16" length in spotting hangers. Weight installed approximately 60 lbs. per section.

Dimensions: Length 491/4" including end ornaments. Width, 151/2" at ceiling. Depth, 101/8".

Wired: Furnished wired for 110-125 volts AC circuits with high power factor two lamp ballasts and FS-4 starters. Total watts, 191 (incl. ballasts). See price list for wiring for other voltages or instant start ballasts. Bears Underwriters' Label.

Catalog No. 70610-XE: Complete four-lamp ceiling luminaire packed and wired for 110-125 volts AC. Less lamps.

## FLUORESCENT RECESSED TROFFERS



These troffers are of three general types (see below). They are equipped with side and end flanges and are easy to install in any type ceiling including T-Bar construction; however, the T-Bar clips are not used to support the unit.

General Construction Features: Wireway is suspended from "U" shape support brackets which are readily adjustable for thickness of framing and plaster or acoustical material. Reflectors are assembled to wireway with wing nuts and complete unit is drawn up to ceiling with long bolts. Sections can be wired together in lengths convenient for installation and installed as a unit. In general, one wire entrance will be sufficient for the entire run.

**Dimensions:** Each unit is 48" long and fits into a 12" slot in the ceiling. This permits alignment of reflectors with acoustical ceiling patterns. Width at bottom over flanges 134". Depth above finished ceiling required for recessing 94" for the two-lamp units,  $10\frac{1}{2}$ " for the three-lamp units.

**Wired:** Furnished wired for 110-125 volt AC circuits with high power factor ballasts and FS-40 starters. Total watts per 4' section: 95 for 2 lamp units, 143 for 3 lamp units. See price list for wiring for other voltages or ballasts. Less Lamps. Bears Underwriters' Recessing Label.

Illumination Data: For locations where minimum luminaire brightness at normal viewing angles is desired specify Curtis Alzak Aluminum Troffers. Brightness of the economy Fluracite Steel Louvered Troffers and the Glass Panel Troffers is moderate and sufficiently low for many applications.

The table below gives footcandle intensities where twolamp Curtis Troffers are used in continuous rows. It may be used with all three type troffers.

Spacing of Two Installed in Co	-Lamp* Troffers ntinuous Rows.	Footcandles Maintained (25% depreciation factor)			
Large Room**	Small Room**	Using 48", 2300 lumen lamp			
3' 4' 5' 6' 8'	2' 3' 4' 41/2'	100 to 125 f.c. 80 to 100 f.c. 65 to 70 f.c. 50 to 60 f.c. 40 to 50 f.c.			

\*If three-lamp troffers are to be used add 30% to footcandle values given. \*\*In a large room width is about 4 times height; in a small room width is approximately equal to height.

Matching Incandescent Units: The square type Incandescent Recessed Units are styled to match these trof-

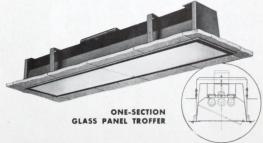
fers. They fit into the hole made by removing one 12" acoustical tile and since they cannot be butted against the fluorescent troffer it is recommended that one complete tile be skipped between the end of the troffer and the incandescent unit. Spotlighting effects and mamy interesting ceiling patterns are possible. (See page 12 for listing).

## ALZAK ALUMINUM TROFFERS With Aluminum Reflector and Louver Alzak Aluminum Finish

For low brightness and high efficiency these Alzak Aluminum Troffers are unexcelled. Reflectors and louvers are of diffuse Alzak Aluminum for better light control. Wireways, etc., of heavy gauge steel for strength. Weight is 24 lbs. per 4' section. Louvers are of the swing down type and provide shielding 35° crosswise and 25° lengthwise.

#### FLURACITE FINISH ALL-STEEL TROFFERS With Steel Reflector and Louver White "Fluracite" Finish

Less expensive than the Aluminum reflector troffers but incorporating the same construction features these Fluracite finish troffers are designed for high utilization of light and easy maintenance. Weight, 33 lbs. per 4' section. Louvers are of the swing down type and provide shielding 35° crosswise and 25° lengthwise.

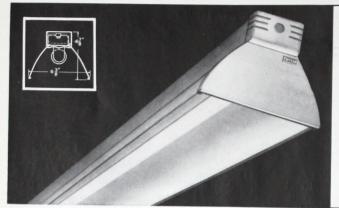


#### With Steel Reflector and Sliding Glass Panels White "Fluracite" Finish

Where troffers are wanted with glass panels these units are recommended. General construction is the same as the louvered types. Weight, 36 lbs. per 4' section. Glass panels are of diffusing glass so arranged as to slide over each other for maintenance. Panels can be quickly removed.

		Alzak Aluminum Louvered Troffers		ite'' Steel d Troffers	"Fluracite" Steel Glass Panel Troffers		
No. of Lamps per section.	Catalog No. Basic Unit	Catalog No. Extension	Catalog No. Basic Unit	Catalog No. Extension	Catalog No. Basic Unit	Catalog No Extension	
2-20 Watt	1712-C 2'		1722-C 2'		1752-C 2'	•	
2-40 Watt	1712-C 4'	1712-CE 4'	1722-C 4'	1722-CE 4'	1752-C 4'	1752-CE 4	
3-20 Watt	1713-C 2'	•	1723-C 2'		1753-C 2'		
3-40 Watt	1713-C 4'	1713-CE 4'	1723-C 4'	1723-CE 4'	1753-C 4'	1753-CE 4	

## FLUORESCENT CURTISTRIP COMPLETE WIRED UNITS



### COEFFICIENTS OF UTILIZATION DEEP REFLECTOR (FLURACITE)

REFLEC-	CEILING		75%			50%		30	1%
FACTOR	WALLS	50%	30%	10%	50%	30%	10%	30%	10%
	J	.38	.33	.30	.37	.33	.30	.32	.30
R	I	.46	.42	.40	.45	.41	.39	.41	,39
0	Н	.50	.47	.45	.49	.47	.44	.46	.44
м	G	.54	.50	.48	.53	.50	.48	.49	.48
	F	.57	.54	.50	.55	,53	.50	.52	,50
N	E	.6l	.58	.55	.59	.57	.55	.56	.55
D	D	.65	.62	.59	.63	,6l	.59	.60	.59
E	C	.67	.64	.6l	,65	.62	.61	.62	,60
X	В	.69	,66	.65	.67	.65	.64	.64	.63
	A	.70	.68	.66	.68	.66	.65	.65	.64

Fluorescent CurtiStrip is neat and attractive, adapted to a variety of commercial and industrial lighting tasks. CurtiStrip Wiring Channel forms the rigid backbone of these units.

Wired and assembled complete with High Power Factor Ballasts, lampholders and starters. Carton Packed in single lamp sections and 8-ft, sections with 2 lamp ballasts. These units need only to be joined together, lamped and connected to the line. Bears Underwriters' Label.

Dimensions: For cross sections see diagrams. Length: Two decorative end caps add  $\frac{3}{4}$ " to nominal length of fixture. Two No. 46 end caps add 1". Thus actual overall length of a 32' fixture is  $\frac{3}{2}$ " if decorative type,  $\frac{3}{2}$ 1" if economy type.

Mounting and Suspension: In mounting on any flat surface for suspension with brackets or hangers. (See next page.)

Decorative Type: Has Satin Silvertone Channel and end pieces, White Fluracite Reliectors, decorative channel end caps and closed reflector ends.

Economy Type: Has plain rust-resisting-finish channel and white Fluracite Reflectors, No. 46 end caps for conduit connection and open reflector ends.

DEEP REFLECTOR FIXTURES have semi-concentrating Fluracite Reflectors. They are intended for general lighting or localized direct lighting over counters, cases and worktables. These Deep Reflector fixtures can also be furnished with Alzak Aluminum reflectors at increased cost. See price list. Order Catalog No. 973-C in place of 940-C or 974-C in place of 942-C for Alzak units.

Catalo	g No.	Nominal	Lamps		
Decorative Type	Economy Type	Length	Required		
940-C 11/2' 940-C 2' 940-C 3' 940-C 4' 940-C* 940-CE 2'†	942-C 1 <sup>1</sup> / <sub>2</sub> ' 942-C 2' 942-C 3' 942-C 4' 942-C* 942-CE 2'+	18" 2' 3' 4' Continuous	15 Watt 20 Watt 30 Watt 40 Watt 2 or more 40 Watt 20 Watt		

ASYMMETRIC REFLECTOR FIXTURES direct the light to one side They are for lighting sloping and vertical surfaces and for show window and cove applications.



Cat	rlog No.	Nominal	Lamps		
Decorative Type   Economy Type			Required		
948-C 11/2' 948-C 2' 948-C 3' 948-C 4' 948-C* 948-CE 2'†	950-C 11 950-C 2 950-C 3 950-C 4 950-C* 950-CE 2	18" 2' 3' 4' Continuous 2'	15 Watt 20 Watt 30 Watt 40 Watt 2 or more 40 Watt 20 Watt		

SHALLOW REFLECTOR FIXTURES have distributing Fluracite Reflectors. They are for general lighting, local lighting when mounted below eye level and for indirect lighting.



Catalo	g No.	Nominal	Lamps
Decorative Type	Economy Ty	e Length	Required
944-C 11/2' 944-C 2' 944-C 3' 944-C 4' 944-C* 944-CE 2'†	946-C 11 946-C 2' 946-C 3' 946-C 4' 946-C*	2 18" 2' 3' 4' Continuous	15 Watt 20 Watt 30 Watt 40 Watt 2 or more 40 Watt 20 Watt

WINGED-BACK REFLECTOR FIXTURES have a streamlined decorative appearance. They are for strip and other decorative lighting



Catalog No.	Nominal	Tamas	
Decorative Type	Length	Lamps Required	
952-C 11/2' 952-C 2' 952-C 3' 952-C 4' 952-C* 952-CE 2'†	18" 2' 3' 4' Continuous 2'	15 Watt 20 Watt 30 Watt 40 Watt 2 or more 40 Watt 20 Watt	

REFLECTORLESS FIXTURES are the simplest type of bare lamp unit. They are suitable for certain strip lighting and decorative application.



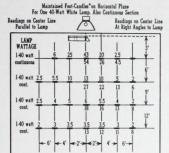
Catalog No.		Nominal	Lamps	
Decorative Type	Economy Typ		Required	
954-C 1 <sup>1</sup> / <sub>2</sub> ' 954-C 2' 954-C 3' 954-C 4' 954-C*	956-C 11/ 956-C 2' 956-C 3' 956-C 4' 956-C* 956-CE 2'	3' 4' Continuous	15 Watt 20 Watt 30 Watt 40 Watt 2 or more 40 Watt 20 Watt	

\*Order by Catalog No. following by length of run required, multiples of 4' only. For example: 940-C 12 ft. 42 ft. extension section only for use with continuous fixtures made up of 4-ft. lengths.

## FLUORESCENT CURTISTRIP

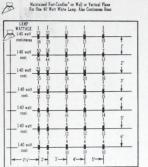
#### FOOTCANDLE CHARTS, HANGERS, LIGHTSTRIP



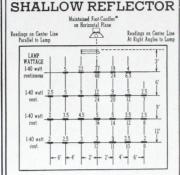


These maintained foot-candle values include a 25% depreciation factor which allows for normal aging of lamps and reduction of light output due to collection of

#### ASYMMETRIC REFLECTOR



"These maintained foot-candle values include a 25% depreciation factor which allows for normal action of lumps and reduction of light output due to collection of cust.

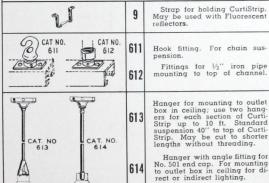


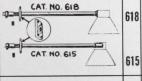
"These maintained foot-candle values include a 25% depreciation factor which allows for normal aging of lamps and reduction of light output due to collection of dust

Charts above show maintained values using 2100 lumen white lamps, and include a depreciation factor of 25% which allows for normal aging of lamps and

collection of dust. When the "Deep" reflector is used for general lighting compute footcandles from Coefficients on the previous page.

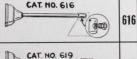
#### HANGERS AND FITTINGS





Support. For mounting on vertical surfaces. Connects to side of CurtiStrip channel. Includes 3/6" iron pipe connector, flexible conduit connector and bushing for cord connections. One support is suggested for each 18" or 24" section: two for longer sections.

Support with angle fitting for No. 501 end cap.



Support with angle fitting for No. 501 end cap. For mounting to outlet box in wall or other vertical surfaces. Slip-ring style canopy.



Support. For mounting to outlet box. Connects to side of CuttiStrip channel. One mounting bracket is suggested for each 18" or 24" section; two for longer sections.

Support. For mounting on top surface of wall case or other horizontal surfaces. Extension is adjustable.

Support with angle fitting for

norzontal surfaces. Extension is adjustable.
Support with angle fitting for No. 501 end cap. For mounting on top surface of wall case or side of table or counter. Extension is adjustable.

#### LIGHTSTRIP UNITS



LIGHTSTRIP is the most compact type of Fluorescent CurtiStrip to be used wherever space is at a premium. The wired units listed below are only a few of the possibilities. Since the ballast is housed in the channel itself between reflectors on these units, the light source is not continuous although the wiring channel is continuous. Where LightStrip is wanted with ballasts mounted elsewhere than in the channel or for other possible arrangements, order by parts. Bears Underwriters' Label

	Catalog	g No.			
Decora		Econom		Nominal Length	Lamps Required
269-C 269-C	3′ 5′	267-C 267-C	3' 5'	3' 5'	18" (15 Watt) 3' (30 Watt) ( 1-3' (30 Watt)
269-C	8'	267-C	8'	8,	11-18" (15 Watt)
269-CE 269-CE	10' 10'	267-CE 267-CE	10' 10'	10' 10'	2-3' (30 Watt) 2-3' (30 Watt)

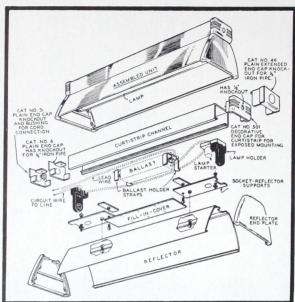
All units listed are basic units, complete with ends except  $267\text{-}CE\ 10'$  and  $269\text{CE}\ 10'$  which are extension sections. Long runs are made up with one basic unit and as many extensions as desired.

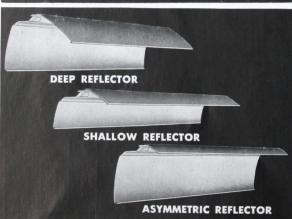
#### LIGHTSTRIP UNIT ASSEMBLIES



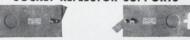
These assemblies are for use in CurtiStrip where space is at a premium. Listed by Underwriters' Laboratories, Inc. Assembly consists of Alzak Aluminum reflector, two ejector type lampholders (one a combination lampholder and starter socket), two reflector end plates and miscellaneous parts. Dimensions: Reflector only for No. 251 (18" lamp) requires 21%" of channel space or 23" including reflector end plates. No. 262 (36" lamp) requires 39%" or 41" including reflector end plates. Reflectors can be butted together where desired and reflector end plates used only at ends of unit. Additional space is required for ballasts which is normally carried in the channel between reflectors.

## FLUORESCENT CURTISTRIP STOCK PARTS





#### SOCKET REFLECTOR SUPPORTS



Each catalog number consists of a pair of supports. For 15, 20, 30 or 40 watt lamps.

Catalog No.	Finish
782	Plain Rust-Resisting
788	Fluracite

#### FILL-IN COVER:

Used only on Reflectorless units. The following lengths of fill-in cover are required:

9"	for	15-watt	lamp	27"	for	30-watt	lamp
15"	for	20-watt	lamp	39"	for	40-watt	lamp

Description		
10' length plain rust-resisting finish 39" length white Fluracite finish		

For the exceptional installation (for example, where convenience outlets are to be used between reflectors) it may be desired to construct custom-made fixtures from stock parts.

#### CURTISTRIP CHANNEL



Channel is available in lengths convenient for use with fluorescent equipment. Channel and covers are made of .040" cold rolled steel, size 2½" wide, 1½" deep. All channel sections have two ½" holes ½" from the ends in back of channel to facilitate attachment of ends. The plain rust-resisting finish units (except Nos. 1 and 1-A) also have on the back ½" knockouts 5" from each end.

Satin Silvertone Finish		Plain (zinc plated) Finish	
Cat. No.	Ler	ngth	Cat. No.
1-C	10'		1-A
561		5'	581
562	18"		591
563	2'		593
564	3'		596
565	4'		597
566	6'		598
567	8'		599
767*	8'		799*

\*Catalog Nos. 767 and 799 have 1736" of channel lip cut out of section permitting use of intermediate crosssection 2 lamp ballasts to be used in CurtiStrip beneath reflectors.

#### "FLURACITE" REFLECTORS

Made of steel with white "Fluracite" finish, Fluorescent CurtiStrip reflectors are highly efficient.

Cat. No.	Type	Length	Distribution
245	Deep	18"	Semi-Conc.
246	Deep	24"	Semi-Conc.
247	Deep	36"	Semi-Conc.
248	Deep	48"	Semi-Conc.
249	Asymmetric	18"	Directional
250	Asymmetric	24"	Directional
251	Asymmetric	36"	Directional
252	Asymmetric	48"	Directional
256	Shallow	18"	Distributing
257	Shallow	24"	Distributing
258	Shallow	24" 36"	Distributing
259	Shallow	48"	Distributing

#### ALZAK ALUMINUM REFLECTORS

Made of aluminum with diffuse Alzak reflecting surface. Deep type reflectors only.

Cat. No.	Type	Length	Distribution
102	Deep	18"	Semi-Conc.
103	Deep	24"	Semi-Conc.
104	Deep	36"	Semi-Conc.
105	Deep	48"	Semi-Conc.

#### REFLECTOR END PLATES

These end plates add rigidity and improve appearance. Finished Satin Silvertone.

Catalog No.	Type
502	Deep
503	Shallow
504	Asymmetric (right end)
505	Asymmetric (left end)

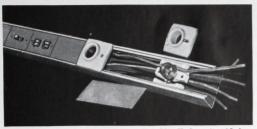


#### REFLECTOR CONNECTOR

Catalog No. 129 consists of a soft metal strap which fits over two adjoining sockets and is bent over reflector making a neat joint and preventing light leakage. Used with all type reflectors. Finish: Satin Aluminum.

NOTE: For End Caps, Couplings (for making continuous runs), Ballast Holder Straps, see next page (Curti-Strip Fittings). For Hangers, see preceding page.
Ballasts, lampholders, starter sockets and wire are not made by Curtis Lighting, but can be ordered from the same supplier who sells the Curtis Parts.

## CURTISTRIP CHANNEL AND FITTINGS ALSO "X-RAY" SOCKETS



CurtiStrip channel and fittings are listed by Underwriters' Labora-

CURTISTRIP is a large capacity wiring channel and raceway which facilitates installation of all types of lighting equipment and offers the maximum in convenience and flexibility for carrying current. Fishing of wires is eliminated and outlets can be introduced at any point or transferred as required. The patented snap-in cover can be easily cut to any length and snapped into the lips of the channel. CurtiStrip channel may be cut to length with a hack saw or sections coupled together to form a continuous channel. Zinc-plated finish.

CAT. NO.	DESCRIPTION	LENGTH
Cat. No. 1	Channel with Cover	10' lengths
Cat. No. 1-A	Channel only	10' lengths
Cat. No. 1-B	Cover only	10' lengths

	Cat. No-	DESCRIPTION		Cat. No.	DESCRIPTION
	5 5-A	Porcelain receptacle with shade holder groove. Special porcelain socket (no shade holder groove) for use with "X-Ray" screw engaging holders.		7 7 7 20	Single receptacle plate. Takes a standard receptacles.
10	6	End cap to close and finish end of CurtiStrip. Provided with $7_8$ " knockout for $1/2$ " conduit (can be reamed to $3/4$ " for lead-in circuit.	00 00	21	Switch plate. Takes standard togg switch.
U	9	Strap for holding CurtiStrip against any flat surface. Overall spread 31/8". Holes on 3-5/16" centers.		23	Duplex receptacle plate. Takes standard receptacles.
30	12	Service box. Top removable. Has four 11/8" knockouts (bottom, end, and two sides) for 3/4" conduit. May be reamed up to 11/4".		24	Bracket assembly for mounting Cu Strip out from transom bar or for si pending from ceiling, Includes \(^{4}\)'' n ple 61\(^{4}\)'' long with two locknuts a No. 13 Bracket.
	13	Bracket to hang CurtiStrip on pipe or chain hanger. Height top to bottom 3".	100	31	Plain bushed end cap. For flexil cord connection. Not listed by Underwriters' Laboratories, Inc.
	14	Elbow adjustable from 70° to 180°. Cover is removable and eliminates fishing of wires. Separable body per- mits using elbow as splice box.		46	Extended end cap, extends 5%" yond end of channel permitting dir conduit connections.
1al	16	Coupling used for connecting two pieces of CurtiStrip. Does not reduce size of wireway or interfere with use of CurtiStrip sockets.	ليا	181	Ballast holder strap. Two are need for each ballast. Can also be used clamp No. 16 coupling into CurtiSt without screws.
	19 19-BX	Nipple attachment (3/g" female thread).		501	Decorative end cap. Cast in mod- tailored design, this end cap gives a ished appearance to unit. Always to No. 501 when unit is to be suspend with hangers having angle littin

#### "X-RAY" SOCKETS AND RECEPTACLES

	BOX COVER RECEPTACLE UNITS
	For Screw Engaging "X-Ray" Holders only
	10145-B For 3" outlet box 10146-B For 4" outlet box
-6	With Groove for Clamping Type Holders
	10160-B For 3" outlet box 10161-B For 4" outlet box
	METAL SHELL PORCELAIN SOCKETS MEDIUM BASE
	For Screw Engaging "X-Ray" Holders only
	8251-S With ½" side outlet With ½" back outlet
	With Groove for Clamping Type Holders
	8290-B With ½" back outlet 8291-S With ½" side outlet
	PORCELAIN RECEPTACLES ONLY
4-1	8051 With Screw Terminals for "X-Ray"
	holders. Medium Screw Base. With Screw Terminals and groove for clamping type holders. Medium Screw
	8103 Base. With Screw Terminals for "X-Ray" holders. Mogul Screw Base.

#### COVE LIGHTING REFLECTORS

Concentrating Type "X-Ray" Cove Reflector No. EC-52 FOR 50-WATT LAMP CATALOG NO. 8255







A small, powerful Silver Mirror Reflector for projecting light to the center ceiling area. These reflectors may be closely spaced for high intensity cove lighting; minimum spacing is \$5\\delta'' on centers. By tilting the sockets or wireway, the reflectors may be mounted at any angle necessary to gain the desired light projection. No. \$255 may also be used for direct lighting and many types of panel and display lighting.

Reflector and Holder: Cat. No. \$255. Reflector only: Cat. No. EC-52. Lamp Required: 40.50-or 60-watt (A-18); 75-or 100-watt (A-21) Lamp. Mounting: For mounting on CurtiStrip with No. 5-A socket, or may be mounted on any of the medium base "X-Ray" sockets shown at left.

## INCANDESCENT RECESSED LIGHTING HOUSED LINES

These units are for general lighting, or for spot and accent lighting. Maximum allowable spacing for good distribution of light with distributing type units is approximately  $1\frac{1}{2}$  times the distance of the unit to the working plane. Concentrating reflector units provide a spotlight effect immediately under the unit. Distribution curves for many of these units are given on next page. See Catalog No. tables for key to Curve Nos.

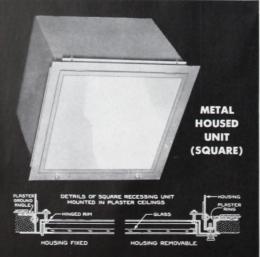




10" Square Pattern Louver as used on square metal housed units.

10" Round Concentric Louver as used on round metal housed units and hinged rim





Finish: Satin Gray on the louver and inside of housing, white Fluracite on the hinged rims. This combination blends well with fluorescent lighting.

Louvers: Concentric type for circular rims; pattern type for square rims.

Glass Lens: Either sanded or crackled finish (crackled finish when used with louvers) on circular rim units; etched for square units.

#### METAL HOUSED RECESSING UNITS

Deep type recessing units bear Underwriters' Recessing Label and are fitted with "X-Ray" reflectors for maximum efficiency. Shallow type have aluminum interior finish and two sockets arranged to hold lamps in a horizontal position. These do not carry the Underwriters' Recessing Label but are suitable for fireproof and semi-fireproof construction where local inspection will approve. All units individually carton packed.

All housed units are fitted with a hinged rim which holds the louver and glass lens. They can be permanently set into plaster ceilings without plaster rings, but plaster rings should be ordered separately when housing must be removable (for access to wiring).

Lorge Round Deep Units —for 300-watt\* medium base lamps. 151/4" depth required for recessing. Dimensions: Housing 141/2" dia., Lens 14" dia., Louver 14" dia., Xim 173/4" overall.

	Distributi	on	
Complete Unit No.	Type Cur	rve No.	Fittings Included
2307 2309 2317* 2318* 2327 2329	Concentrating Distributing Concentrating Distributing Concentrating Distributing	2-B	Crackled glass lens only Crackled glass lens only Concentric louver only Concentric louver only Lens and louver Lens and louver
Plaster Ring if re	equired is Cata	log No.	14038.
			pecify No. 2417 in place

sockets and ventilated housing suitable for only fire-resistive

Large Round Shallow Units — For two 150-watt lamps. 6" depth required for recessing. Dimensions: Housing 14½" dia., Len: 14" dia., Rim 173%" overall.

construction.

Complete Unit No.	Type	Fittings Included		
2302 2322	Distributing Distributing	Sanded glass lens only Lens and louver		
Plaster Ring if req	uired is Catalog No.	14038.		

Small Round Deep Units —For 200- or 300-watt medium base lamp 12½° depth required for recessing. Dimensions: Housing 11-3/16" dia., Lens 10" dia., Louver 10" dia., Rim 12%" overall.

	Distributi	on			
Complete Unit No.	Type Curve No.		Fittings Included		
2304 2306 2314 2315 2324 2326	Concentrating Distributing Concentrating Distributing Concentrating Distributing	4-B 3-A 4-A	Crackled glass lens only Sanded glass lens only Concentric louver only Concentric louver only Lens and louver Lens and louver		
Plaster Ring if re	equired is Cata	log No.	14037.		

Small Round Shallow Units — For two 100-watt lamps. 6" depth required for recessing. Dimensions: Housing 11-3/16" dia., Lens 10" dia., Louver 10" dia., Rim 125%" overall.

Complete Unit No.	Type	Fittings Included Sanded glass lens only Lens and louver		
2301 2321	Distributing Distributing			
Plaster Ring if requ	ired is Catalog No	o. 14037.		

Square Deep Recessing Units — For 200- or 300-watt medium base lamp. 131/4" depth required for recessing. Dimensions: Housing 10% sq. Lens 10" square. Louver 10" square. Rim 131/4" square. These units match Recessed Troffers on page 7.

	Distrib	ution		
Complete Unit No.	Type Curve No.		Fittings Included	
2455 2484 2485 2494 2495	2455 Distributing 2484 Concentrating 2485 Distributing 2494 Concentrating		Etched glass lens only Pattern louver only Pattern louver only Lens and louver Lens and louver	

Square Shallow Units — For two 100-watt lamps, 6" depth required for recessing, Dimensions: Housing 107/6" sq., Lons 10" sq., Rim 131/4" sq. These units match Recessed Troffers on page 7.

Complete Unit No.	Туре	Fittings Included	
2451 2491	Distributing Distributing	Etched glass lens only Lens and pattern louve	
Plaster Ring if regu	ired is Catalog No.	14042.	

## INCANDESCENT RECESSED LIGHTING HINGED RIM UNITS ECONOMY UNITS

#### HINGED RIM UNITS UNHOUSED

Catalog Nos. for hinged units include "X-Ray" reflector, holder, socket and shell, mounting collar, and hinged rim with either cover glass, concentric louver, or both. Individually carton packed, less reflector; reflectors are packed separately. Plaster ground rings are not included but should be ordered separately when units are to be set into a plaster ceiling. These units do not carry Underwriters' Recessing Labels but are suitable for fireproof or semi-fireproof construction where local inspection will approve.

B-(OIR TO CUT HOLE)

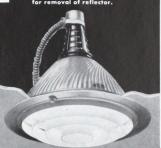
UNITS	DIMENSIONS				
UNITS	A	В	C		
2101 - A to H 2102 - A to H 2103 - A to H 2104 - B to H 2105 - A to H 2106 - A to H 2109 - B to H	151/8"† 127/8"† 127/8"† 121/2"* 111/4"* 127/8"* 83/4"*	141/2" 141/2" 141/2" 105%" 105%" 75%"	17%* 17%* 17%* 125%* 125%* 125%* 9½*		
*Add 1/2" to allow removal of re		m clear	ance for		

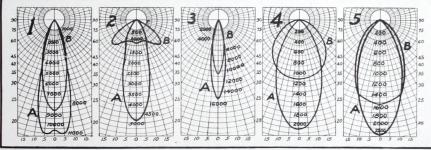
With Glass Lens Only*	With Lens* and Louver	With Louver Only
No. 2101-A Curve No. 2-B	No. 2101-F	No. 2102-H Curve No. 2-A
No. 2103-A Curve No. 1-B	No. 2103-F	No. 2103-H Curve No. 1-A
No. 2104-B* Curve No. 4-B	No. 2104-F	No. 2105-H Curve No. 4-A
No. 2106-A Curve No. 3-B	No. 2106-F	No. 2106-H Curve No. 3-A
No. 2109-B*	No. 2109-F	No. 2109-H
	Lens Only* No. 2101-A Curve No. 2-B No. 2103-A Curve No. 1-B No. 2104-B* Curve No. 4-B No. 2106-A Curve No. 3-B	Lens Only* and Louver No. 2101-A Curve No. 2-B No. 2103-A Curve No. 1-B No. 2104-B* Curve No. 4-B No. 2106-F Curve No. 3-B  No. 2106-F

\*Sanded glass lens used on Nos. 2104-B and 2109-B, crackled glass on other units.

PLASTER RINGS: Catalog No. 14038 is plaster ring for 14" size units;

Catalog No. 14034, for 10" size units; Catalog No. 14011 for 7" size units.





DATA FOR ALL
CURVES OBTAINED
WITH MEDIUM BASE
300-WATT PS-35
INSIDE FROSTED
LAMP

#### **ECONOMY RECESSING UNITS**

#### Open Reflector and Snap-in Louver Types

Complete Unit Nos. include ceiling flange, "X-Ray" Silver Mirror Reflector and socket and shell with side outlet for ½" flexible conduit. Nos. 2120-H and 2130-H also include a snap-in concentric louver. No louvers are available for other units. Economy units are not cartoned. These units do not carry Under-

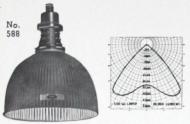
writers' Label but are suitable for fireproof and semi-fireproof construction where local inspection will permit. Plaster Ring if required is to be ordered separately.

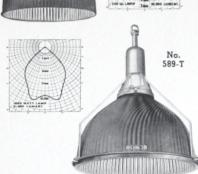


_				Flange		DIMENSIONS		Plaster Ring (no
Complete Unit No.	Reflector Type	Wattage and Distribution	Louver	Cat. No.	A*	В	С	included
2120-H	588	500 or 300 (distrib.)	Yes	14025	133/8"	121/2"	141/2"	14312
2122	588	500 or 300 (distrib.)	No	14025	133/8"	121/2"	141/2"	14312
2124	848	500 or 300 (semi-conc.)	No	14110	111/8"	135/8"	153/8"	14111
2125	842	500 or 300 (semi-conc.)	No	14110	111/8"	135/8"	153/8"	14111
2126	575	200 or 300 (distrib.)	No	14021	101/8"	10"	12"	14028
2127	810	200 (semi-conc.)	No	10417	93/8"	111/8"	131/4"	14035
2128	804	200 or 300 (conc.)	No	10417	11 "	111/8"	131/4"	14035
2130-H	575	200 or 300 (distrib.)	Yes	14021	101/8"	10"	12"	14028
2132	535	100 (distrib.)	No	14001	75/8"	63/8"	75/8"	

## INCANDESCENT INDUSTRIAL UNITS

WITH "X-RAY" SILVER MIRROR REFLECTORS





Recommended for general industrial lighting. Simple to apply and easy and economical to maintain, these units provide excellent vertical illumination and high utilization on the

#### FOR 300- OR 500-WATT PS LAMP

Catalog No. 588 consists of "X-Ray" Silver Mirror Reflector (12" diameter) socket and vibration proof holder. Socket shell has back outlet tapped for 1/2" conduit with 3/8" reducer. Height to top of socket is 141/4". Catalog No. 588-T includes a tripod holder with metal retaining ring.

#### FOR 750- 1000- 1500-WATT PS LAMP (OR 400-WATT MERCURY LAMP)

Catalog No. 589 consists of an "X-Ray" Silver Mirror Glass Reflector (16" diameter), socket and vibration proof holder. Unit is provided with a loop fitting or loop can be discarded for mounting on ½" conduit. Height of unit to top of socket husk is 171/2". Catalog No. 589-T includes also a tripod holder with

COFFFICIENTS									
Ceiling 75% 50% 30%									
Wa		50 %	30 %	10 %	50 %	30 %	10 %	30 %	10 %
loom	J	.48	.45	.43	.47	.45	.43	.45	.42
	I	.57	.55	.54	.56	.54	.53	.54	.52
	H	.61	.60	.59	.60	.59	.58	.59	.57
	G	.65	.64	.64	.64	,62	.62	.62	,61
	F	.69	.67	.65	.66	.65	.64	.65	.63
	E	.71	.70	.69	.70	.69	.67	.68	.67
	D	.75	.73	.71	.73	.71	.71	.71	.70
	C	.77	.75	.72	.75	.73	.71	.71	.71
	В	.78	.76	.75	.76	.74	.73	.73	.72
	A	.79	.77	.76	.77	.75	.74	.74	.73

CO	E	FF	1	C	11	E P	1	S	
Ceiling 75%				50%			30%		
Walls	50	30	10	50	30	10	30	10	
	1%	%	%	%	%	%	%	%	
Room J Index	47	45	42	.45	44	42	44	41	
I	.56	53	52	.54	53	51	52	50	
H	.60	59	58	.58	57	57	57	56	
G	.64	63	62	62	61	60	61	59	
F	67	65	64	64	63	62	,63	,61	
E	69	88	.67	68	67	65	66	,65	
D	.73	71	.70	71	70	69	69	68	
C	.75	73	.71	73	71	70	70	69	
В	.76	74	73	74	72	71	71	70	
A	77	76	74	75	73	72	72	71	

#### WINDOW UNITS INCANDESCENT SHO





made of crystal glass mirrored with pure silver and protected from deterioration Height with holder 10". by the famous "Golden Armor" backing.

Use Nos. 420 or 530 for shallow windows, No. 500 for deep windows; for large windows or for super lighting, No. 1010. All these reflectors except No. 500 are of the "Attraction-Zone" type; that is, they concentrate maximum candlepower in the lower portion of the display, the 'Attraction-Zone". No. 500 is an angle INSTALLING SHOW WINDOW REFLECTORS type reflector designed to illuminate deep

NO. 420 —Semi-concentrating reflector for 150- or 100-watt lamp. Less lamp. Adjustable holder included. Louver, extra accessory, is No. 12420 (U-Type). Dimensions: Diameter 85%". Height with Holder 7-9/16"

NO. 530 -Semi-concentrating reflector for 300-, 200- or 150-watt medium base incandescent lamp. Adjustable holder included. Louver, extra accessory, is No. 12531 (U Type). Dimensions: Diameter 934". Height with holder 9-1/16".

NO. 500 - Angle type reflector for deep windows. For 300-, 200- or 150-watt medium base incandescent lamp. Ad-

"X-RAY" Show Window Reflectors are justable holder included. Dimensions: Width 10"; depth, front to back, 101/2".

NO. 1010 - Semi-concentrating reflector for 500- or 300-watt mogul base incandescent lamp. Holder included is No. 10010, 334" "X-Ray" Holder which fits "X-Ray" mogul sockets only. Socket included No. 8300-B with ½" back outlet. Dimensions: Diameter 13". Height with holder and socket 123/8"

Nos. 420, 500 and 530 have clamping type holders and are usually installed on CurtiStrip using No. 5 socket or on outlet box by means of box cover receptacle unit; when recessing, socket and shell combinations are used.

No. 1010 is installed directly on con-

duit or on a 1/2" or 3/8" nipple. These units may be recessed with finishing flanges. See below.

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RECESSING SHOW WINDOW REFLECTORS									
eflector No.	Finishing	DIMENSIONS			Plaster	DIMENSIONS			
	Flange Cat. No.	A	B+	С	Ring Cat. No.	Minimum Spacing•	"X"*		
420 500 530 1010	10517 11500 14026 14110	91/4" 115/8" 101/2" 135/8"	83/4" 10 " 131/2"	4½" 4¾" 5½" 5½"	14027 None 14028 14111	10%" 11¾" 15½"	11 " 123%" 157/8"		

† Dimension "B" is diameter to cut hole for finishing flange.

\*Dimension "X" is distance from front to back of plaster ring, measured on mounting screw hole-centers. \*This is overall width of flange. §Asymmetrical opening. Use flange as templet, overall width of flange, 12".

## ILLUMINATION DESIGN DATA

#### GENERAL PROCEDURE

Procedure for use with Coefficient of Utilization charts.

#### ROOM INDEX

The Room Index table classifies rooms according to width, length, and height of light source. For indirect and semi-indirect luminaires, use the ceiling height. Determine the room index and apply it in the Coefficients of Utilization Table.

#### COEFFICIENTS OF UTILIZATION

These tables bring together all of the conditions that affect the utilization of light. The figure obtained by reference to this table (for the type of fixtures used, the size and finish of the room in which these are to be installed) is the percentage of the lumens given out by the lamps that reached the working plane. For example, a coefficient of utilization (CU) of .40 means that 40% of the light is useful in producing footcandles and that 60% is absorbed by the walls, ceiling and the fixture itself.

#### MAINTENANCE FACTOR

Initial footcandles measured when lamps are new and when the equipment is clean will be higher than the average maintained in service. To allow for this, a Maintenance Factor (MF) is given with each Coefficient of Utilization table to indicate the percentage of initial illumination to be expected under reasonable maintenance schedules of cleaning and repainting.

## LUMENS AND FOOTCANDLE CALCULATION

The lamp lumens required to light a given area are computed from the formula:

$$Lumens = \frac{Footcandles \times Area}{CU \times MF}$$

The average maintained footcandles provided by a lighting system may be computed from the formula:

$$F.C. = \frac{\text{Total lumens} \times \text{CU} \times \text{MF}}{\text{Area of room}}$$

#### LUMEN OUTPUT OF LAMPS

	TYPE "	F" LAMPS	(Fluorescent)	
Watts	Daylight	Soft White	3500° White	4500° White
20	800	700	920	860
30	1350	1170	1470	1380
40	1920	1720	2300	2100
40*				2100
100	3900	3300	4200	4000

TYPE "C" LAN	MPS (Incandescent)
Watts	Initial Lumens 110-125 volts
200	3650
300 (Medium Base)	5900
300 (Mogul Base)	5650
500	9950
750	15500
1000	21500
1500	33000

				200								
			(	CEILING	HEIG		ET					
	ndirect and Lighting	9 and 91/2	10 to 11½	12 to 13 ½	14 to 16 ½	17 to 20	21 to 24	25 to 30	31 to 36	37 to 50		
		MC	UNTIN	G HEIG	HT AB	OVE FI	OOR-	FEET				
	and Semi- Lighting	7 and 71/2	8 and 8 1/2	9 and 9 1/2	10 to 11½	12 to 13 ½	14 to 16½	17 to 20	21 to 24	25 to 30	31 to 36	37 to 50
	Room Length (Feet)					RO	OM INI	DEX				
9 (812-9)	8-10 10-14 14-20 20-30 30-42 42-up	H H G G F E	I H G G	I I H H G	H I I I	1 1	1	1				
10 (9½-10½)	10-14 14-20 20-30 30-42 42-60 60-up	G G F F E	H H G G F	I H G G F	H H I	H	1 1	1				
12 (11-12½)	10-14 14-20 20-30 30-42 42-60 60-up	G F E E	H G G F F	H G G F	I H H G G	H I I	] ] ]	1				
14 (13-15½)	14-20 20-30 30-42 42-60 60-90 90-up	E E D D	G F E E	H G F E E	H H G F F	I H H G F	J I I H G	1 1 1	1 1	1 1		
17 (16–18½)	14-20 20-30 30-42 42-60 60-110 110-up	E D D D	F E E E D	G F E E	H G G F F	H H G G F	I H G G	I I I	1 1	1 1 1	1 1 1	
20 (19-21½)	20-30 30-42 42-60 60-90 90-140 140-up	D D C C C	E D D D	E E D D	G E E E	H G F F	H G G F F	H	H 1 1	1 1	1 1 1	1
24 (22-26)	20-30 30-42 42-60 60-90 90-140 140-up	DCCCCC	E D D D C C	E D D D	F F E E E	G F F E E	H G F F	H H G G	H I I I	1 1 1	1 1	1 1
30 (27–33)	30-42 42-60 60-90 90-140 140-180 180-up	C C B B B B	DCCCCCC	D D C C C C	E D D D D	F E E E	F F E E	H G F F	H H G G	H H I I	1 1 1	111111111111111111111111111111111111111
36 (34–39)	30-42 42-60 60-90 90-140 140-200 200-up	B B A A A	C C B B	D C C C C C C	E D C C C C	E E D D	FFEEEE	H G F F	H H G F	H H G G	H	1 1 1
42 (40-45)	42-60 60-90 90-140 140-200 200-up	A A A A	B B A A	B B B	CCCCC	E D D D	E D D	E E E	H G F F	H G G F	H H G	111111111111111111111111111111111111111
50 (46-55)	42-60 60-90 90-140 140-200 200-up	A A A A	Â.	B A A A	CCCC	CCCC	E D D D	F E E E	F E E	G F F F	H G G G	H
69 (56-67)	90-140 140-200 200-up	A	A	A	B B B	C C C	CCC	D D D	E E E	E E F	G F F	H
75 (68-90)	90-140 140-200 200-up	A	A A A	AAA	A	B B B	C B B	D C C	E D D	E E	F	H G G
90 or more	60-90 90-140 140-200 200-up	AAA	AAA	A	A	B A A	B B B	D C C	E D D C	EED	G F F E	H G G F

Room Index is the classification of a room according to its proportions; large and small rooms of the same proportion have the same Index. Hence, for large rooms of dimensions greater than those shown, divide each dimension by the same number and use the Index determined for the smaller room.

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CURTIS LIGHTING OF CANADA, LTD.

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## "Eye-Comfort" LUMINAIRES

The Finest in Indirect Lighting

Made of steel, glass and Alzak Aluminum, Curtis "Eye-Comfort" luminaires are famous for beauty and efficiency. All hangers have a self-aligning fitting and high edge canopies, permitting the use of canopy switch (not included). Less lamps.





#### "DISCUS" LUMINAIRES

For Silvered Bowl Lamps Low-Priced and Highly Efficient

Catalog No. 1020—For 300\* or 500 watt Silvered-bowl lamp. Bowl diameter 20". Suspension to top of bowl 36". Finish: Alzak Aluminum.

\*When wanted for use with 300 watt lamp, order also adapter ring, Catalog No. 6055, to center the smaller diameter lamp in the fixture.

Catalog No. 1024—For 750 or 1000 watt Silvered bowl lamp. Bowl diameter 26". Suspension to top of bowl 48". Finish: Alzak Aluminum.





#### "EDGE-RAY" LUMINAIRES

The "Edge-Ray" ring at the top of the bowl redirects a portion of light to give a shimmering luminous effect.

Catalog No. 1250—For 300 or 500 watt lamp, Bowl diameter 21½". Suspension to top of bowl 36". Finish: Alzak Aluminum. Catalog No. 1270—For 750 to 1500 wattlamp. Bowl diameter 27½". Suspension to top of bowl 46". Finish: Alzak Aluminum.





#### "LARRA" LUMINAIRES

Beauty in shining aluminum and softly luminous opal glass.

Catalog No. 5080—For 300 or 500 watt lamp. Bowl diameter 20". Suspension to top of bowl 36". Finish: Alzak Aluminum. Catalog No. 5080—For 750 to 1500 watt

Catalog No. 5080—For 750 to 1500 watt lamps. Bowl diameter 24". Suspension to top of bowl 42". Finish: Alzak Aluminum.





#### "WINNER" LUMINAIRE

The secret of its efficiency is the "X-Ray" Silver Mirror Reflector concealed in the bowl.

Catalog No. 5090—For 300 or 500 watt lamp. Bowl diameter  $19\frac{1}{2}$ ". Suspension to top of bowl 36". Finish: Satin Gray.



#### WALL URN

CATALOG NO. 1548—An "X-Ray" Silver Mirror Reflector finished Bronzed Aluminum in a Satin Aluminum supporting bracket. For 300 or 500 watt lamp. Height 14". Width 13". Projection 13½".

Reflector included is Catalog No. EC-69 which is specially shaped to project light into the room and to minimize side wall splash.

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SERIAL 2200

# CURTIS LIGHTING, INC.

6135 W. 65TH STREET . CHICAGO 38, ILLINOIS

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